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A Qualitative Study on the Types and Purposes of Social Activities in Late Life

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Abstract

This qualitative study examines older adults' subjective views on the types and purposes of social activities. In-depth interviews were conducted with a purposive sample of 20 older adults, with low (n = 10) and high (n = 10) memory performance. We used grounded theory methods to analyze the narrative data. Four types of social activities—Altruism, Creativity, Game, and Motion—were identified. The purpose of social activities included enjoyment, relaxation, stimulation, and belongingness. Those in the low memory group seemed to face more barriers to participation. Different types of social activities may be important for cognitive health and well-being.

Keywords

social relationships; social activities; cognitive health; memory; qualitative analysis

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Introduction

With the number of older adults growing in America and around the world, an important concern in later life involves maintaining cognitive health. Cognitive health has been defined as a continuum of cognitive function ranging from cognitive decline to impairment and dementia (Lee et al., 2010). Further, cognitive health involves being able to perform all of the mental processes that are collectively known as cognition—memory, language, attention, judgment, and executive function (The Centers for Disease Control and Prevention, 2011). While some changes to cognitive health are a normal part of aging, a decline that impacts older adults' everyday functioning and independence is not normal. Declining cognitive health is detrimental to the lives of older adults and their loved ones, which is reflected by increasing health care costs, risks of institutionalization, and caregiver burden (Hughes & Ganguli, 2009).

While there are no clinically proven therapies for maintaining cognitive health, one area of research has focused on how participation in social activities may be important for cognitive health. Numerous studies have found a connection between participating in social activities during later life and better cognitive health (Barnes, Mendes de Leon, Wilson, Bienias, & Evans, 2004; Wang, Karp, Winblad, & Fratiglioni, 2002), including less cognitive decline (James, Wilson, Barnes, & Bennett, 2011; Wang et al., 2013), decreased risk of cognitive impairment (Geda et al., 2011; Hughes, Flatt, Fu, Chang, & Ganguli, 2012), and reduced risk of dementia (Paillard-Borg, Fratiglioni, Xu, Winblad, & Wang, 2012). However, there is quite a bit of discrepancy in how social activities have been conceptualized and assessed across these studies. Researchers have utilized various scales and questions ranging from six to 12 plus items as well as measures of social interactions with families, friends, and other contacts (Zunzunegui, Alvarado, Del Ser, & Otero, 2003). Further, some studies have included productive activities, like working or household chores (Barnes et al., 2004; Bassuk, Glass, & Berkman, 1999), while others have included leisure activities, cultural activities, and more physically or cognitively demanding activities (Singh-Manoux, Richards, & Marmot, 2003).

Thus, there is a need for studies that can help to further characterize the variety of social activities done in late-life. Less is known about the purpose of social activity participation and the different types of social activities that older adults prefer to participate in. Given this gap in knowledge, we conducted an in-depth investigation of older adults' perspectives on social activities in late life and also asked them about potential implications for cognitive health. The aims of our study were to: 1) explore the types of social activities engaged in; 2) describe reasons for older adults' participation in social activities; and 3) compare their experiences by memory performance in order to identify aspects that could be relevant to cognitive health in late life.

Background

Engaging in social activities in late life may offer various provisions that could be important. Social activities may fulfill a broad range of goals, including leisure, enjoyment, and productivity (Glass, de Leon, Marottoli, & Berkman, 1999). Some have suggested that older

adults' cognitive health may benefit from the level of cognitive effort involved (Singh-Manoux, Richards, & Marmot, 2003), the reinforcement of meaningful social roles (Glass et al., 1999), the enjoyment provided (Rook, 1987), and/or the opportunities for self-expression (Pitkala, Routasalo, Kautiainen, Sintonen, & Tilvis, 2011).

It is less clear what types of social activities could be important for cognitive health in late life. Some have found that doing more productive social activities, such as volunteering, may be beneficial to psychological and overall health in late life (Morrow-Howell, 2010; Tang, Choi, & Morrow-Howell, 2010). In the Experience Corps Study, participants in a volunteer-based intervention program at elementary schools experienced improvements in memory and executive function over four to eight months (Carlson et al., 2008). Opportunities for self-expression and creativity may also be important in late life. A qualitative study found that creativity may encourage successful aging by providing opportunities for problem-solving, motivation, and improved functional health (Fisher & Specht, 1999). Further, several studies examining the effects of art-related interventions have demonstrated that creativity may impact factors related to memory. One study found that older adults who participated in chorale groups had less loneliness and higher morale compared to controls (Cohen, 2006; Cohen et al., 2007); the chorale group also showed a trend toward better memory performance.

Evidence from observational studies and randomized controlled trials have also demonstrated that participating in cognitively stimulating activities, such as games, may be beneficial to cognitive health (Hughes, 2010). Several studies have identified a connection between playing games and cognitive health (Lustig, Shah, Seidler, & Reuter-Lorenz, 2009). Finally, numerous studies have identified physical activity as an important factor for cognitive health in late life (Erickson, Gildengers, & Butters, 2013). Perhaps group-based physical activities could be important.

Interest in social activities and the goals fulfilled by these activities may also differ by gender and racial/ethnic group. For instance, research with older men has found that they tend to participate in social activities that have more defined purposes or tasks (Zunzunegui et al., 2003). Participation in social activities may be different for racial and ethnic groups. For instance, Barnes and colleagues (2004) suggest social activity measures may underestimate the frequency and types of social activities done by older African Americans. Most late-life social activity measures have been developed with Caucasian samples, and it is likely they are not as culturally relevant for minority groups.

It is challenging to identify the key purposes or why older adults participate in social activities, but a multidisciplinary lens may shed further light on the important facets. From the fields of education and gerontology, Havighurst's “Activity Theory of Aging” states that activities are important for equilibrium, adaptation to role loss, and life satisfaction (Atchley, 2006). Additional insight into the purposes of late-life social activities comes from social psychology. Mannell (1993) identified unique elements of leisure activities—opportunities for investing time and energy, a lack of obligation, and experiencing a flow state.

There is also quite a bit of literature on the purposes of participating in social and leisure activities that is outside of the realm of gerontology and aging-related research. For instance, work in positive psychology by Csikszentmihalyi (1991) suggested that a flow state involves an optimal or highly enjoyable experience where individuals can become highly immersed in an activity. Csikszentmihalyi identified several key elements of a flow state, such as balance between challenge and skill, deep concentration, a minimization of worries and frustrations, and an autotelic experience or done simply for enjoyment. Finally, from philosophy and sociology, Roger Caillois studied the purpose of play and games in society (Caillois, 1961). He depicted play as free (a diversion that is enjoyable and attractive); separate (not a part of everyday life); uncertain (outcomes are not predetermined); unproductive (no goods, wealth, or new elements are created); governed by rules (order is established by laws); and finally; make-believe (another reality is created).

Less is known about the types of social activities that older adults tend to participate in, and the majority of the research has utilized composite scores from measures that captured some social activities. Caillois (1961) identified specific categories of activities based on the type of skill or experience involved. While these were not specific to social activities for older adults, they may be representative of some of the activities performed in late life. *Agôn* represented activities that encompass elements of competition (sports or other types of games). *Alea* involved games of chance (e.g., playing bingo or going to casinos). *Ilinx* or *Vertigo* entailed activities that alter one's consciousness (e.g., riding a merry-go round or skydiving). Finally, *Mimicry* involved activities that create new worlds or simulate alternative realities (e.g., dance, theaters, and the arts in general). Caillois also emphasizes the role of the spectator in Mimicry and that it can be a more passive activity. Some activities could fall into multiple categories. For instance, a game could involve competition and chance (e.g., golf, card games, etc.), or simulation and altering of one's consciousness (e.g., theme parks or traveling).

There is a need for research that specifically characterizes the specific types of social activities that are done in late life. Further, understanding why older adults participate in social activities is important for tailoring social activities that encourage participation and meet older adults' specific needs. Very little of the literature has explored why older adults participate in social activities; or what components of social activities may be important for cognitive health. The purpose of this study was to: 1) explore the different types of social activities that adults participate in later life, 2) identify the purposes of participating in these social activities, and 3) examine whether there were any differences in the types and purposes of social activities by memory performance.

Methods

Design

We conducted a qualitative in-depth interview study with older adults from different neighborhoods in Allegheny County, Pennsylvania, USA from June to September 2012. Participants were recruited from a community-based study on the primary prevention of falls. Our initial eligibility criteria for the study included living within the vicinity of the Allegheny County, being age 50 or older, speaking English, and completing the Memory

Impairment Screen for telephone (MIS-T). During a telephone interview with the larger community-based study, eligible participants signified their interest by agreeing to allow us to contact them. A purposive sampling strategy was used to recruit 10 individuals with a low memory score and 10 with a high memory score. The MIS-T, a brief four-item assessment validated for screening episodic memory performance in community-based samples (Buschke et al., 1999; Lipton et al., 2003), was used to assess memory. Scores can range from 0 to 8 (higher scores indicate better memory performance), and Buschke et al. (1999) have suggested that a score of 4 or 5 may indicate possible memory problems and/or dementia. Because of the limited availability of eligible participants with a score of 5 or less, the low memory groups' scores ranged from 0 to 6, and a score of 7 or 8 was used for the high memory group. In order to be more inclusive of diverse perspectives from older adults, efforts were also made to recruit minorities and men since studies have suggested that there could be differences in social activity participation (Zunzunegui et al., 2003).

Procedures

With the approval of the University of Pittsburgh Institutional Review Board, eligible participants were contacted by telephone, and interviews were scheduled at the convenience of the participant. In order to create a comfortable environment, all of the interviews were conducted in-person at participants' homes or another agreed upon site (e.g., local restaurant, public park, and library). Prior to the interview, the interviewer obtained verbal informed consent and reviewed the measures in place to protect confidentiality. Interviews lasted about 68 minutes on average, with a range of 45 to 125 minutes. All of the participants agreed to be audiotaped, and participants were provided $20.00 as compensation for their participation.

A semi-structured, open-ended interview guide was used to encourage participants to provide a personal narrative on their experiences with and views on the role of social activities in late life. Our interview questions were informed by the multidisciplinary literature on aspects and functions of late-life social activities, including roles, purposes, and types (Atchley, 2006; Caillois, 1961; Csikszentmihaly, 1991). Prior to the start of the interview, participants were told about the purpose of the study and that we were interested in social activities that could be important for their memory and/or to keep their mind active. A grand tour question (tell me about where you grew up, your family, your career, etc.) was used to develop rapport and obtain a brief life history from each participant. Subsequent questions were asked about the different types of social activities they participate in, why they participated in the activities, and aspects of social activities that may be important for cognitive health. Near the end of the interview and to further probe about whether social activities were important for cognitive health, we asked participants to identify social activities that might help them to keep their mind active or memory sharp. To close the interview, we asked participants to answer a scenario question: “Imagine you could spend a day doing anything you wanted. Money, time, and health are no object. How would you spend your day?” To ensure the trustworthiness of the findings, informal member checking was completed during the interview by repeating back statements said by participants to allow them to clarify or rephrase key points. In addition, a short debriefing period allowed

participants to discuss the overall interview experience and any additional thoughts they had on the research topic.

Analysis

All of the interviews were transcribed verbatim, and all personal information was transcribed in a way that maintained participants' anonymity. Grounded theory methods (Glaser, 1999) were used to examine the text for types, purposes and other aspects of social activities that might be important for cognitive health. This involved an iterative process of reviewing the transcripts until core themes emerged. The transcripts were analyzed as the study progressed and we appeared to have reached saturation by 10 – 12 interviews.

Collectively, the principal investigator and another investigator examined and decidedupon a thematic coding strategy, which involved us meeting regularly to discuss the themes identified from reading and coding the transcripts and comparing our findings to the literature. Further, our analysis began with an open coding process, where we read the transcripts and analyzed chunks of text that depicted participants' accounts of the various social activities they engaged in, their descriptions of the purpose of these activities, and their responses to whether certain social activities could be important for cognitive health. Next, we decided upon the initial themes for the types of social activities, purposes of social activities, and aspects related to cognitive health. The next step involved comparing the identified themes to current theory and concepts from our review of the multidisciplinary literature. For instance, Calliois (1961) specific categories of activities were compared with the types of social activities described by participants, which lead us to identifying similarities and differences in social activities identified from our interviews. This process allowed us to refine our identified types of social activities and specific themes on the purposes of social activities in late life.

Coding of primary and secondary social activities was based on the top two social activities mentioned by participants; these social activities were coded based on the frequency in which participants mentioned them and the level of enthusiasm or regard depicted by their accounts of the activity. Primary represented social activities mentioned most often and with the highest esteem, while secondary represented activities discussed less often than primary but still frequently and with high esteem. Often the primary activity was mentioned by participants during the scenario question and/or when asked to identify a social activity that was their favorite. After final coding was completed, the memory performance score was revealed, and we coded for differences among those in the high and low memory groups. Throughout this process, investigators held consensus meetings to categorize the data, resolve code divergence, and decide upon the final core codes.

Results

Participants

Table 1 displays participants' sociodemographic characteristics by memory performance. The sample consisted of 20 older adults, 10 with a low memory score (4 to 6) and 10 with a high memory score (7 or 8). Participants included 13 women and 7 men, aged 61 to 86 years

(mean = 76 years). Those in the low memory group were slightly older (mean = 79 years) compared to those in the high memory group (mean = 73). The majority were Caucasian (n = 17), and 3 were African American. Most of the participants lived in their own homes, with a spouse or significant other. One participant lived in a senior living community. Seventeen had completed high school or the equivalent, and more than half had attended at least one year of college. Looking at scores on the MIS-T, those in the low memory group had a lower average score (5.7) compared to those high memory group (7.8). Participants were from 15 different neighborhoods throughout Allegheny County, Pennsylvania.

Four Types of Social Activities

In response to our range of questions on social activities, participants said they engaged in a wide variety of social activities. However, our coding and analysis revealed that activities mentioned by participants tended to fall into one of four types (Table 2). These involved "Altruism," "Creativity," "Game," and "Motion." We also found that when participants were asked about the social activities that they liked to do most, they tended to list only one or two. We coded these social activities as primary or secondary, based on the top two social activities that participants mentioned frequently and the feelings they expressed about the activity.

Altruism

Participants listed several different social activities that involved Altruism orhelping others. The majority (18 out of 20) mentioned participating in altruistic activities on a regular basis. Social activities involving Altruism included volunteering with church or other organizations, participating in church-prayer groups and ministering, planning and organizing activities for others, teaching others a new skill or activity, and babysitting and/or other forms of caregiving. Participants used various words to describe these altruistic social activities, such as "giving," "supporting," "helping," "sharing," and "making others happy." Examining whether altruism was considered participants' primary or secondary social activity, 9 participants mentioned that engaging in Altruism was a very important part of their life. The following are examples of how Altruism was conveyed by participants:

> [T]here is something else I have to do in my life or I wouldn't be here. Hopefully, it is something that helps other people. There has always been a desire to help. I would have loved to be a teacher maybe. – (78 year-old woman, primary)

> There used to be this little hymn that children sang *Brighten the Corner Wherever You Are*. That is my purpose in life. I am brightening corners and trying to bring a little joy to people or a little more joy to people. – (80 year-old man, secondary)

Creativity

Creativity was represented by participants' interests in doing social activitiesthat involved using their imagination and/or being transported to a different reality. Further, creativity could involve active participation in some form of artistic expression or being spectator of art created by others or in nature. Creativity encompassed the following types of social activities: painting, singing, going to knitting or crocheting classes, traveling, being in

nature, watching performances, and bird watching. Further, words used to describe these types of activities included “seeing new things,” “creating,” “exploring,” “adventure,” “learning,” and “escaping to another world.” Only three participants did not mention doing creative social activities. Based on our coding of primary and secondary social activities, 12 participants listed Creativity as an important part of their life. For example:

> Just give me time and money. I would travel. My mother told my first husband that when the stork delivered me, he forgot to unpack the bag. I love to travel. That would be my favorite thing. That is what I would like to do. – (76 year-old woman, primary)

> [Painting] just takes your brain out of the realm of reality, and you just get into your right brain and can totally relax. Once you are in it, you go “my God it is 12:30 and I have been doing it for three hours.” I guess it is like a computer, but it is more pleasant and creative. – (69 year-old woman, primary)

Game

Participants often mentioned playing games with others as an important aspect of theirsocial lives. Game-related activities were done with others for amusement, fun, and the chance ofwinning. It included solving puzzles, using skill and being challenged, aspects of chance or an opportunity to win or lose, and at times competition and at other times non-serious play. Commonly mentioned Game-related social activities included playing cards, board games, and Wii games; sports such as bowling, tennis, and golf; games of chance like bingo, slots, and betting on football pools; and broader problem-solving activities, such as crossword puzzles, discussing how to solve past or current problems, and geocaching. Words used to describe these types of social activities included “never knowing the outcome,” “challenge,” “surprise,” “logic,” “problem solving,” and “winning or losing.” Game was mentioned by more than half of participants (16 out of 20), and we classified it as the primary or secondary social activity for 12 participants. Further, those who had Game as their primary or secondary activity often mentioned problem solving as a key element:

> Well, we like to solve problems. Although it is not really problem solving. We use a Garmin [referring to geocaching] and we are not that lucky. It is just the excitement of finding it…you go out and see what you can find, enjoy it, and appreciate it. – (66 year-old woman, secondary)

> Well, I think you get a gem when somebody gives you an insight or perspective that you don't have. It is like finding a little diamond or nugget in the road. That is what you are looking for; the little nuggets. It is amazing what you don't know about things.… That is kind of what I like. – (77 year-old man, primary)

Participants also mentioned that competition was not the most important aspect of games, and that playing was never too serious. One participant, a 61 year-old woman, said what she liked about playing games was “just being around and socializing. Just playing and enjoying what you are doing. It is not whether you win or lose.” A 75 year-old man said, “I like the competition to a point, but it isn't something that upsets me. If someone wins, I might laugh or kid around. If I win, I might kid or poke around.” Finally, an 83 year-old African American man mentioned that “the driving forces of economic life are competition,

cooperation, and human behavior. Now, you can put that into education or religious life or baseball life…. It is the everyday facets of life."

Motion

The last category of social activities mentioned by participants, Motion, representedthose social activities involving movement and an altering of one's physical perception. While these activities could be similar to Game, participants' descriptions focused less on the competition or winning and losing and more on being physically active with others. Motion-related activities that were social or done in groups included swimming, biking, exercising, hiking, dancing, and taking aerobics and exercise classes (yoga, Tai Chi and Silver Sneakers). Several types of words were used to describe Motion-related social activities, including "moving," "movement," "keeping active," and "exercise." Overall, 15 out of the 20 participants mentioned doing some type of social activity involving Motion. Looking at whether it was a primary or secondary social activity, Motion was the least mentioned of the four activities, with only four people listing it as their primary or secondary social activity. Those who did mention Motion had the following to say:

> You get to move around and people be talking; talking while you have been moving. It is like a happy feeling. Like a party! When we get together, we are like show me how to do this. When we get together it is more like a party….I like line dancing. – (74 year-old woman, secondary)

> I love doing Tai Chi…there is just this special feeling of just sharing something that we all enjoy and makes us feel good. Throughout my life, my most favorite thing was movement. There was something about me that I could express through movement that I didn't express any other way. That is really pretty huge for me. – (61 year-old woman, primary)

Primary and Secondary Activities

We also noticed that there was often a connection between the social activities we coded as primary and secondary. Altruism was often connected to another type of social activity. For instance, two participants whose primary activity was Motion (line dancing and Tai Chi) were coded as having Altruism as their secondary activity because they often mentioned volunteering to teach others how to do the Motion-related social activity. Another participant who mentioned painting (Creativity) also volunteers (Altruism) to organize trips for her painting class. At other times, a primary social activity might be comprised of two elements. For example, bird watching involved traveling, being out in nature, and admiring the beauty of the birds (all could be considered Creativity), as well as not knowing what you'll see and having to search for birds (aspects of Game).

Differences in Types of Social Activities by Memory

After final coding was completed for the types of social activities, we examined whether there were differences in participants' engagement in the social activity types by memory performance (Table 3). Overall, participation in Creativity- and Game-related social activities did not seem to differ by memory performance. When looking at Motion, only about five participants in the low memory group ever mentioned participating in Motion-

related social activities compared to all 10 participants in the high memory group. Further, only 8 participants in the low memory group reported doing Altruism, while all 10 in the high memory group reported doing some type of Altruism-related social activity. Examining our categorization of social activities as primary and secondary, about the same number of participants had Altruism and Game as their primary or secondary social activity. Similar to overall findings, three participants in the high memory group were categorized as having Motion-related activities as their primary or secondary, while only one was categorized in low memory group. We also found that more participants (n = 8) in low memory group were classified as having Creativity-related activities as their primary or secondary compared to those in the high memory group (n = 6).

Purpose

Participants listed a range of reasons for participating in social activities. In response to asking participants, “What keeps you doing the social activities that you do?”, participants' accounts seemed to depict a context in which social activities fulfilled a purpose. Participants further framed the purpose of participating in social activities in terms of their needs for *enjoyment*, *relaxation*, *stimulation*, and *belongingness*. Participants often mentioned more than one purpose for their participation.

Enjoyment

Enjoyment was listed a major reason for why participants engaged in the different typesof social activities. Terms such as “happiness,” “rewarding,” “gratifying,” “pleasure,” “fun,” and “makes you feel good” were used by participants to convey enjoyment as a purpose for doing social activities. For instance, a 72 year-old woman mentioned the following about why she does Altruism-related activities: “I just like to help and make people happy. It makes me happy. If they are happy and content, then I am too.” Another participant, an 80 year-old man, mentioned that he did creative activities, such as going to operas and symphonies, because:

> Intuitively, I just love it… You know my heart leaps up when I behold a rainbow in the sky by Emily Dickinson. That's it! My heart leaps up. Things make my heart leap up and make me feel good, really good. I have never been pinned down to why do I or what do I get out of this; pure pleasure, pure enjoyment. That is what it is all about.

Further, some participants mentioned that they wouldn't participate in social activities if they didn't enjoy them. Statements like “I wouldn't do them if I didn't enjoy them” and “I won't do something if I don't like it” reflected some participants' desire for autotelic experiences and opportunities that allow them to do what they enjoy.

Relaxation

Other participants described a sense of relaxation when they participated in thedifferent social activities. Relaxation was characterized by participants as an opportunity for escape, being restorative and nurturing to one's body, and/or serving as a diversion. This often came

up when asking participants about why they participated in Creativity-related activities. An 83 year-old man mentioned the following about spending a day doing anything he wanted:

> What I would do is get in my car and … go to my friend Carl's house. Carl and I used to sing together…. We would sit down and we would end up singing. Anything I would want to do. I would go see Carl, and we would sing together. We'd sing gospel songs together…. That would be my relaxation for the day.

For some participants, social activities provided them with an opportunity to heal ornurture their bodies. They used terms like being fulfilled, refreshed, and/or restored to describe the Purpose of social activities. One participant talking about the purpose of Tai Chi said,

> You are nurturing yourself. A lot of the movement involves a constant eV and flow, and it is nurturing like rocking a baby. I don't know if it is boiled down to endorphins or what, but you are influencing your nervous system distinctly…. I am centering myself, calming myself, learning how to move more efficiently, learning how breathe more efficiently and stand up with greater ease, learning to do everything better; and then you realize you are calm, quiet, more centered, and more relaxed.

Stimulation

Other participants expressed that they did social activities for stimulation or to keeptheir minds active. Stimulation was represented by participants' needs for challenge, discovery, learning, and fulfillment. For instance, an 86 year-old man described his reason for attending educational courses as, “To keep my mind open and active is good. I am learning about things I never knew about before. I am more knowledgeable.” Another 69 year-old woman, who talked about square dancing said,

> We started square dancing three years ago. Boy is that an activity to keep you alert mentally. It is a logical dance, and six other people are depending on you to remember what number you are in the group and where you are turning.

Belongingness

For some participants, the social aspect of these activities was most important. Severalparticipants mentioned that they did social activities because of a desire for closeness, trust, and/or to feel respected and liked. They talked about the need for being with others, and the importance of maintaining social relationships. A 74 year-old African American woman expressing why she liked to do activities with others said,

> [It is] the communication and the togetherness. Just the atmosphere I like.… I listen to the atmosphere and the people, and I feel a part of it. I like to be around people. Just to be with people. I get involved!

Another 82 year-old woman described how the closeness she has with her sewing groupreinforced her commitment to attend:

> A group of us get together every Thursday and sew blankets for Linus, babies. Lap robes for nursing homes and stuff…. We have a good time together, and we care for each other, and we call if we can't come. Well, I feel like I am compelled. Like

> where were you if I don't come. Only in cases of sickness will they accept an excuse for not coming. We are that close. They would be upset with me if I didn't come.

Differences in Purposes by Memory

For purposes of social activities, we did not notice major differences by memory performance. All of the participants mentioned that they engaged in social activities because they provided opportunities for enjoyment and belongingness. With regards to relaxation, 5 in high memory group mentioned relaxation compared to 3 participants in the low memory group. The majority of the participants in the high memory group (9 of the 10) mentioned doing social activities for mental stimulation, and 7 of the 10 participants in the low memory group mentioned doing social activities for stimulation.

Additional Differences by Memory

Barriers

We then examined participants' narratives to identify differences by memory performance. We identified two major themes that reflected barriers to participating in social activities—*withdrawal* and *impairment*. Participants in the low memory group frequently mentioned that they faced barriers when trying to participate in social activities. Sometimes participants in the high memory group mentioned barriers; however, they did not seem to hinder participation in social activities.

Withdrawal—Withdrawal involved participants giving up social activities or mentioning that they nolonger liked doing an activity. For instance, one 78 year-old man from the low memory group mentioned:

> I taught computers at the senior center…. I taught it for about 5 or 6 years. They closed the senior center … and moved to the other center… it wasn't conducive to teaching the way I taught….I tell you what they bore me. Senior citizens bore the hell out of me. All they want to do is play bingo. I can't stand bingo, and there is no one there that I can converse with, talk to.

Other participants in the low memory group talked in similar ways about why they no longer did certain social activities, such as saying “I just got tired of doing it,” “things have slowed down,” and “just don't like to go anymore.” In contrast, those in the high memory group tended to mention how they looked for new opportunities. A 66 year-old female participant from the high memory group said, “I am always looking for some excitement or try something different….When an opportunity comes around for a new experience, I usually jump on it.” Another 72 year-old woman in the high memory group mentioned “As you get older, you have to keep active. Whatever you like to do, do it. It is really about that I think.”

Impairment—Most of the participants in both memory groups listed some type of impairment, such as health, transportation, or social isolation. Those in the low memory group seemed to have more health problems and complaints of social isolation (a shrinking social network). Health problems were a common impairment for those in the low memory

group. “My doctor said that I should stop tutoring and take it easy” said an 83 year-old man in low memory group. With regard to limiting activity, a 76 year-old woman, stated, “I have developed neuropathy in my feet, and I like to walk and do things like that. I am not walking anymore.” Social isolation differed from withdrawal in that it had more to with changes to participants' social networks that were outside of their control. For participants in the low memory group, they were more likely to mention that social isolation impacted their ability to do social activities. For instance, “I haven't found anyone that wants to go. A couple times I've chosen one of the musicals at the high schools, but I can never find anybody that wants to go.” said an 81 year-old woman in the low memory group. Another 83 year-old woman in the low memory group stated, “They (friends) are all older than me and they have trouble walking….A lot of my friends are all dying off.” Although those in the high memory group did at times mention health issues or social isolation, these Impairments did not seem to prevent them from doing social activities. For instance, a 78 year-old woman in the high memory group mentioned how even though she had a stroke three years ago, she still searches for new social activities to do, and strives to be more independent.

Discussion

This study provides an in-depth look at the types and purposes of social activities in which adults participate in later life. The voices of these older adults and our overall interpretations provide a unique perspective on why engaging in social activities may be important in late life. We identified four types—Altruism, Creativity, Game, and Motion—that represented the different social activities done in later life.

Our classification of these social activities were quite similar to Caillois' characterization of games (Agôn and Alea) except that we combined competitive and non-competitive into our category of Game and added a category for service activities—Altruism (Caillois, 1961). Our inclusion of altruistic social activities supports Havighurst's “Activity Theory of Aging,” which suggests that older adults tend to replace roles lost as they age (Atchley, 2006). As further indication social activities potential role in late life, the majority of participants mentioned doing Altruism and more than half mentioned that these types of social activities were part of their everyday life (coded as primary or secondary).

Participants also reflected on the various purposes that were fulfilled by social activities: enjoyment, relaxation, stimulation, and sense of belongingness. These findings are in line with the work of Csikszentmihalyi (1991), who has highlighted that a flow state or highly enjoyable experience allows individuals to become highly immersed in activities. This includes deep concentration or mental stimulation, a minimization of worries or relaxation, and enjoyment. Enjoyment was one of the key purposes of social activities identified in our study; and all of the participants talked about doing social activities for this purpose. Our findings are also similar to Rook's research on companionship (Rook, 1987), or participation in late-life social activities for rewarding and enjoyable social interactions.

Social Activity Types and Implications for Cognitive Health

While our study cannot draw causality, our findings on the four different types of social activities are in line with previous work on the potential benefits of social activities on

cognitive health in late life. For instance, we identified Altruism as a common social activity in late life, and studies have found that volunteer programs may help to improve memory in late life (Carlson et al., 2008). Other studies have found that creative activities may help older adults with cognitive and functional tasks, such as problem-solving, skill building, and memory performance (G. Cohen, 2006; Fisher & Specht, 1999). Several of the participants in our study mentioned that doing creative social activities because they allowed them to express themselves or learn new skills. Further research is needed to determine whether creative activities could be used as an intervention to improve memory and other health-related outcomes in late life.

Studies have also found an association between playing games and cognitive health in late life (Hughes et al., 2014; Lustig et al., 2009). We found that participants often mentioned problem solving as a key component of why they played games. Older adults who like to play games with others might benefit from them by maintaining or building new skills. Problem solving may be an important aspect of game playing that should be considered when studying the potential effects of games on cognitive health in late life. Finally, while Motion was mentioned less than the other social activities, we found that older adults in the high memory group were more likely to report doing Motion-related social activities. These differences may have been due to barriers, such as withdrawal or health impairments, in the low memory group. While there seems to be strong evidence for the benefits of physical activity in late life, especially for cognitive health (Erickson et al., 2013), less is known about whether socially-based physical activities could be beneficial. There is also a need for developing group-based physical activities that can be done by those with health and physical limitations. Research on group classes, such as Tai Chi, have found associations with participation and memory performance (Mortimer et al., 2012). While it seems plausible that social activities could be beneficial to cognitive health, there is a need for future studies on whether certain types or participating in a variety of social activities could be important for cognitive health in late life.

The Purpose of Social Activities and Implications for Cognitive Health

Enjoyment, relaxation, stimulation, and belongingness were the primary reasons olderadults in our study participated in social activities. These reasons have been alluded to in previous studies on the physical, mental, and social well-being of older adults. Less research has explored the specific relationships between enjoyment and cognitive health in late life; however, there could be plausible mechanisms supporting their association (Flatt & Hughes, 2013). Rook has found an association between participation in enjoyable social activities and lower levels of loneliness, better relationship satisfaction, less emotional distress (Rook, 1987, 1994; Rook & Ituarete, 1999), and better overall health (Ashida & Heaney, 2008). Less is known about how enjoyment could be important for cognitive health, but research on the “pleasure-reward” system in the brain—a system that involves endorphins, dopamine, and serotonin—may help to increase our understanding (Winwood, Bakker, & Winefield, 2007).

The need for relaxation in late life is another purpose that may be fulfilled by social activities. Research on social activities has found that positive interactions may protect

against chronic stress (Seeman, Singer, Ryff, Dienberg Love, & Levy-Storms, 2002). Berkman and Glass (2000) have speculated that participating in social activities may buffer against stress by encouraging meaningful social roles that reinforce older adults' sense of identity and self-esteem. There is a need for further research on how stress reduction techniques might influence cognitive health in late life (Aggarwal et al., 2014).

Another finding on the purpose of participating in social activities for participants in this study was the need for stimulation. Older adults may be inclined to seek out social opportunities that stimulate their mind. Similar to our study, a qualitative study found that older adults considered cognitive stimulation as an important aspect of successful aging (Reichstadt, Depp, Palinkas, Folsom, & Jeste, 2007). This may suggest that older adults are interested in preventive strategies aimed at maintaining cognitive health. Finally, participants also expressed that social activities provided them with a sense of belongingness. Opportunities for meaningful interactions and a greater sense of belongingness may be important in late life. Like Havighurst's notion of adaptation to role loss, the need to belong and form new social attachments could be important in late life, especially for mental and physical health (Baumeister & Leary, 1995). These social attachments may also provide social support (Kawachi & Berkman, 2001), which some studies have found to be associated with cognitive health (Dickinson, Potter, Hybels, McQuoid, & Steffens, 2011).

Future research is needed to examine how the various purposes of late-life social activities could be important for well-being and cognitive health. For instance, could enjoyment be an important element of social activities that enhances its potential effect on cognitive health. Other important questions involve studying whether the level of relaxation or stimulation provided by social activities matters. Answering these questions could be helpful to researchers and practitioners trying to develop social activity-based interventions that reflect real-world settings.

Barriers and Cognitive Health

Finally, our findings suggested that there may have been some differences by memory performance, with those in the low memory group being more likely to mention withdrawing from social activities and encountering barriers to participation. A number of studies have suggested that social withdrawal could be a prodrome of cognitive health problems (Glymour, Weuve, Fay, Glass, & Berkman, 2008). For our study, older adults in the low memory group were more likely to mention a disinterest in social activities. This phenomenon deserves further study. Researchers should also consider whether older adults with cognitive health problems may benefit from strategies aimed at increasing motivation for continued participation in social activities. Those in the low memory group were more likely to mention having impairments that impacted their participation in social activities. Future research on how to help older adults to overcome barriers to participating in social activities is needed; these findings could be helpful to those designing interventions and social programs for older adults.

Strengths and Limitations

Several strengths and limitations of our study should be noted. Our study was primarily inductive and based on accounts from a small purposive sample of older adults; this could also be a strength since we were able to collect rich and highly detailed subjective experiences that provided a clearer and deeper understanding of the types and purposes of social activities in late life. Another limitation of this study is that we did not identify any differences in activity types or purposes by gender or race; unfortunately, we had a limited number of participants that were men and/or African American. While our conclusions about social activity types, purposes for participation, and potential benefits for cognitive health may not apply strictly to other populations and regions, we have raised several important questions that deserve further study.

An additional limitation of our study involved comparing differences by memory performance. Our low memory group most likely did not represent those with severe memory impairments. While we used the MIS-T, a validated tool for assessing potential memory impairment, our score for the low memory group was a 6 or less rather than the typical score of 5 or less. Using this score for our low memory group was due to the limited availability of participants. However, those in our high memory group (a score 7 or 8) most likely had a much better performance; their memory scores were also significantly different from those in the low memory group. It is plausible that some of the differences that we identified by memory could be due to participants inability to recall all social activities. Further investigation is necessary to examine how participation in social activities may differ by memory performance. Our finding of social withdrawal in those with memory problems suggests that there could be a bidirectional relationship between engagement in social activities and memory. Future longitudinal studies are needed to examine this complex relationship. Finally, while we discussed implications to overall cognitive health, our study cannot draw causality. We discuss our findings in terms of memory, but it is only one domain of cognition and it is important to examine how our findings might apply to broader domains of cognitive function in late life.

Conclusion

We identified four specific types of social activities that may fulfill a range of older adults' physical, mental, and social well-being—the opportunity for enjoyment, relaxation, stimulation, and a sense of belonging. Promoting and supporting these dimensions of well-being could have important implications for their cognitive health in late life. It is also important to consider older adults' barriers to participation in social activities, as well as the need for targeted efforts for those who are becoming socially isolated or withdrawing from activities. Practitioners should consider providing older adults with opportunities to participate in a variety of social activities, especially those that are enjoyable and mentally stimulating. Future research should consider the different types of social activities, and their impact on cognitive health and well-being.

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Table 1
Sample characteristics by memory performance

Variable	Low Memory (n = 10)	High Memory (n = 10)
Age, Mean (SD)	79 (5.5)	73 (8.1)
Female, n (%)	5 (50)	8 (80)
Caucasian, n (%)	8 (80)	9 (90)
Marital Status, n (%)		
Single	2 (20)	0 (0)
Married	5 (50)	8 (80)
Widowed	3 (30)	2 (20)
Education, n (%)		
Less than high school	2 (20)	1 (10)
High school grad or GED	2 (20)	4 (40)
Some college or college grad	6 (60)	5 (50)
MIS-T, mean (SD)	5.7 (0.7)	7.8 (0.4)

Notes: SD = standard deviation; GED = General Education Development; MIS-T = memory impairment screen for telephone.

Table 2

Description of social activity types

Activity	Definition and Examples
Altruism	Social activities that involve doing for others or providing a service in order to help. Examples: volunteering, teaching, caregiving/babysitting, and planning or organizing for social group
Creativity	Social activities that involve imagination and the creation of different realities. Examples: watching theater, singing, painting, crocheting, learning about arts and craft, traveling and sightseeing, and bird watching.
Game	Social activities that involve playing games with varying levels ofchallenge, chance (winning or losing), and competition. Examples: problem solving, geocaching, gambling, bowling, and playing tennis, golf, bingo, or videogames.
Motion	Social activities that involve movement and/or altering one's perception. Examples: dancing, bike riding, exercising, swimming, hiking, kayaking, and taking aerobics and Tai Chi classes.

Table 3

Social activities categorized as primary/secondary by memory performance

	Low Memory		High Memory	
	Overall	Primary & Secondary	Overall	Primary & Secondary
Activity Category	N	N	N	N
Altruism	8	5	10	6
Creativity	9	8	9	6
Game	9	6	8	5
Motion	5	1	10	3